

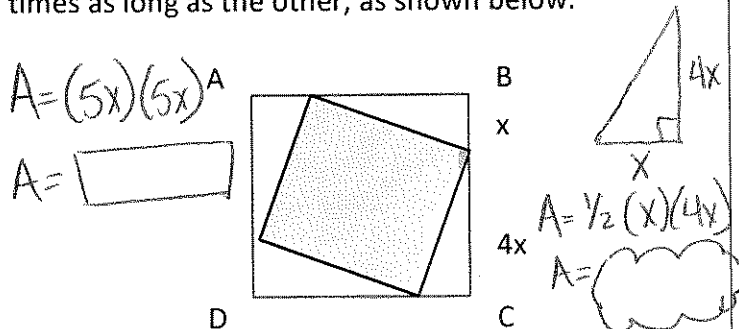
# Homework 77 - FORM A

## Finding Complex Areas

Name: \_\_\_\_\_  
Period: \_\_\_\_\_ Date: \_\_\_\_\_

Failure to show all work will result in a LaSalle.

1) In the figure below, ABCD is a square. Points on each pair of adjacent sides of ABCD are connected to form 4 congruent right triangles with one leg four times as long as the other, as shown below.



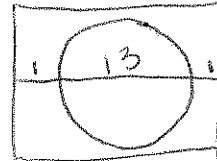
a) What fraction of the area of square ABCD is UN-shaded?



b) What fraction of the area of square ABCD is shaded?

2) Domino's sells 13-inch pizzas in square boxes that leave one inch on each side of the pizza.

a) Draw a diagram.



b) What is the area of the base of the box?

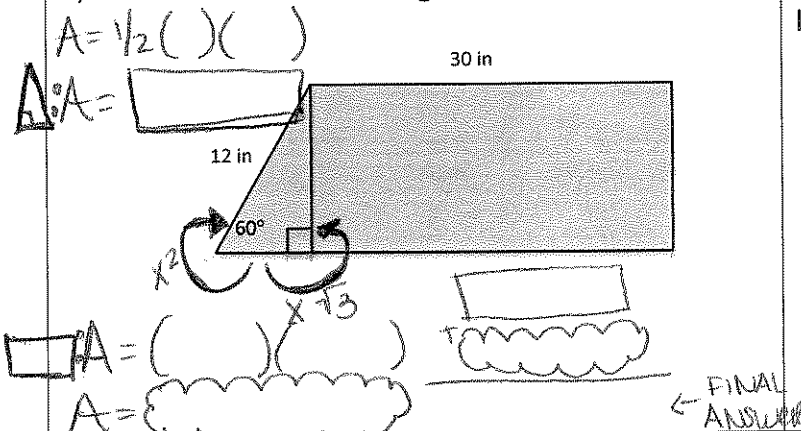
$1 + 1 + 13 = ( )$   
 $( ) ( ) = A$   
 $\text{[ ]} = A$

c) If Domino's decides to print advertisements on the bottom of the pizza box, what area would be seen before the pizza is eaten or removed? Round to the nearest tenth.

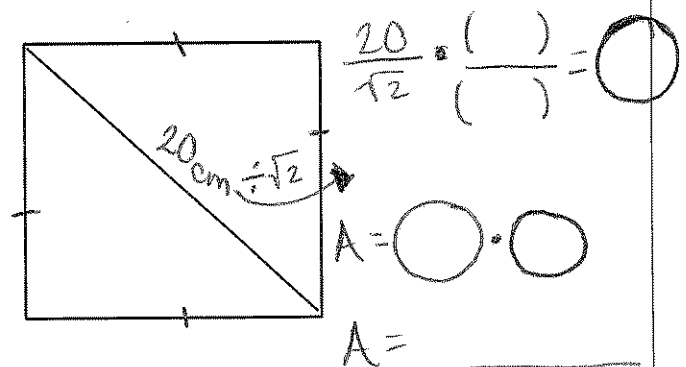
$A = \pi r^2$   $A = \pi ( )^2$   
 $r = 6.5$   $A = \text{[ ]}$

$\text{[ ]} - \text{[ ]} = \text{[ ]}$

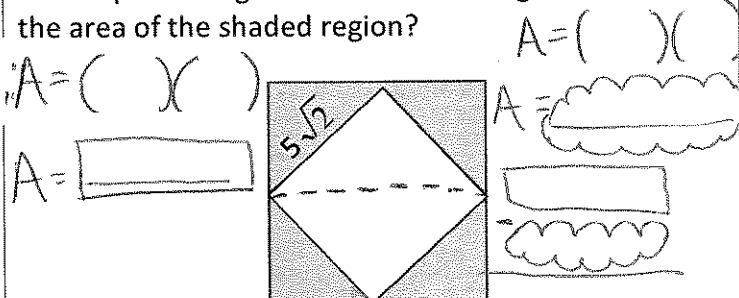
3) What is the area of the figure shown below?



4) The figure below is a square. The diagonal has a length of 20 cm. What is the area of the square?



5) The square tile shown below has painted corners in the shape of congruent 45-45-90 triangles. What is the area of the shaded region?



6) A circle is inscribed within a square such that the edges of the circle touch each of the four sides of the square. If the area of the square is 144 square inches, what is the area of the circle?

